FIG. 1

<u>1</u>: ELECTRONIC SETTLEMENT SYSTEM
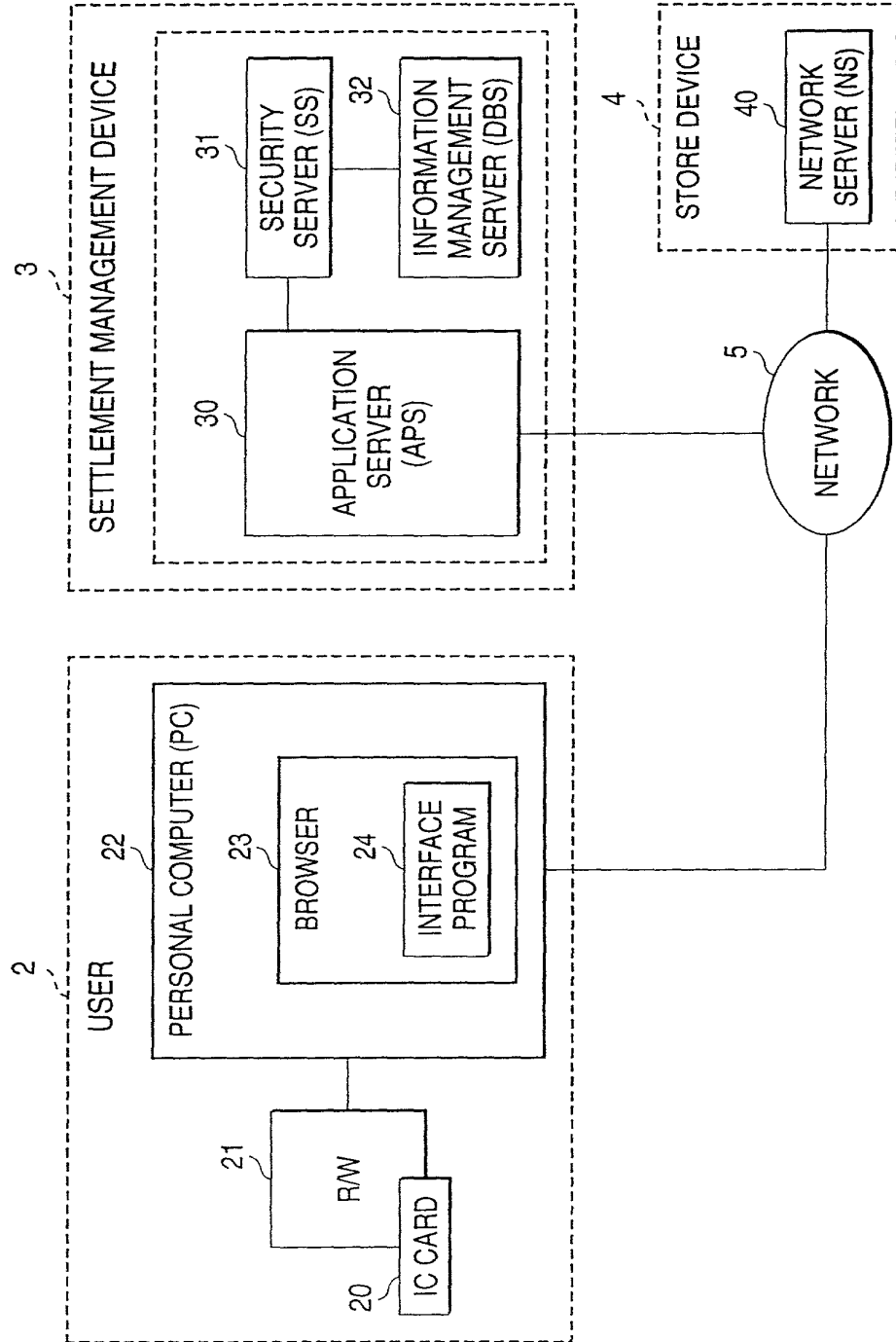
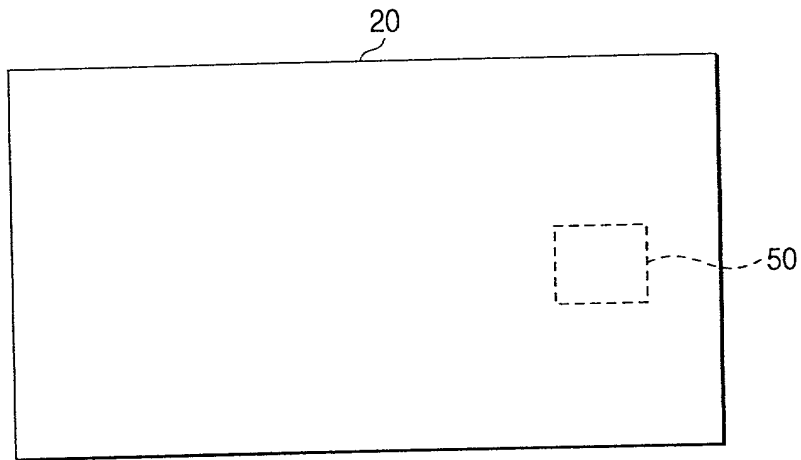## FIG. 2A
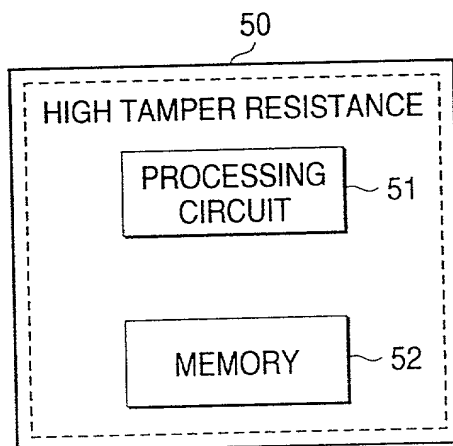
20

50

FIG. 2B

50

HIGH TAMPER RESISTANCE

PROCESSING
CIRCUIT — 51

MEMORY — 52

FIG. 3

FIG. 4

NETWORK SERVER 40

APPLICATION 61

HTTPS LAYER 60

PKI PROTOCOL

USER 2

IC CARD 20

R/W 21

INTERFACE PROGRAM 24

BROWSER PROGRAM 23

PC 22

FIG. 5

FIG. 6

SETTLEMENT MANAGEMENT SYSTEM

SECURITY MANAGEMENT SYSTEM ~31

KEY INFORMATION

REAL ELECTRONIC MONEY SYSTEM ~33

CAREFUL EXAMINATION AND SETTLEMENT SYSTEM ~32

NEGATIVE CARD INFORMATION/ VARIOUS MASTER

LOG INFORMATION

NEGATIVE CARD INFORMATION/ VARIOUS MASTER

KEY INFORMATION

LOG INFORMATION

NEGATIVE CARD INFORMATION/ VARIOUS MASTER

KEY INFORMATION

VIRTUAL ELECTRONIC MONEY SYSTEM ~30

CREDIT PERMISSION BODY

CREDIT PERMISSION

CREDIT PERMISSION

INTERNET 5

5

PC 22
R/W 21
CARD 20
2

MALL 41
MEMBER STORE 42
MEMBER STORE 42
MEMBER STORE 42
MEMBER STORE 42
4

6

7

STORE 71
HEAD OFFICE 72
STORE 71
STORE 71
STORE 71

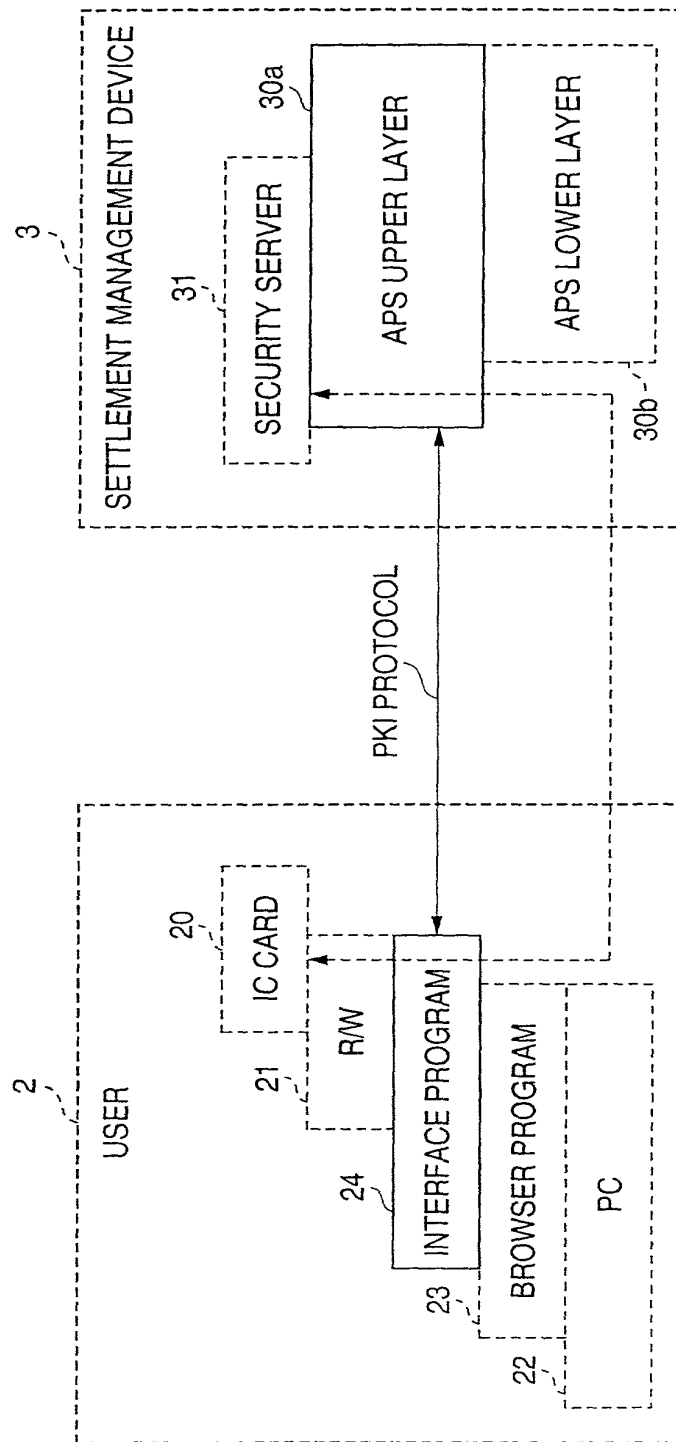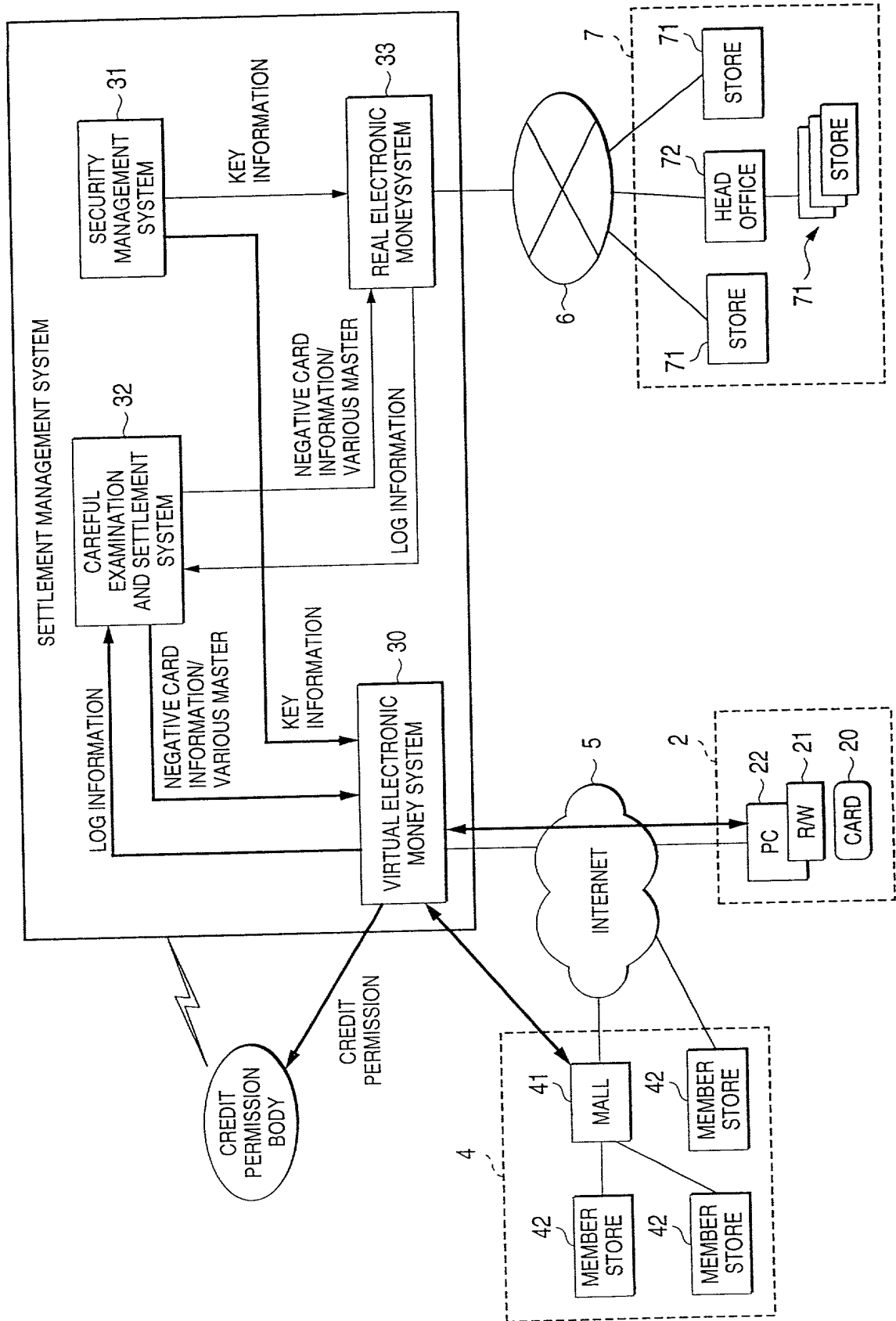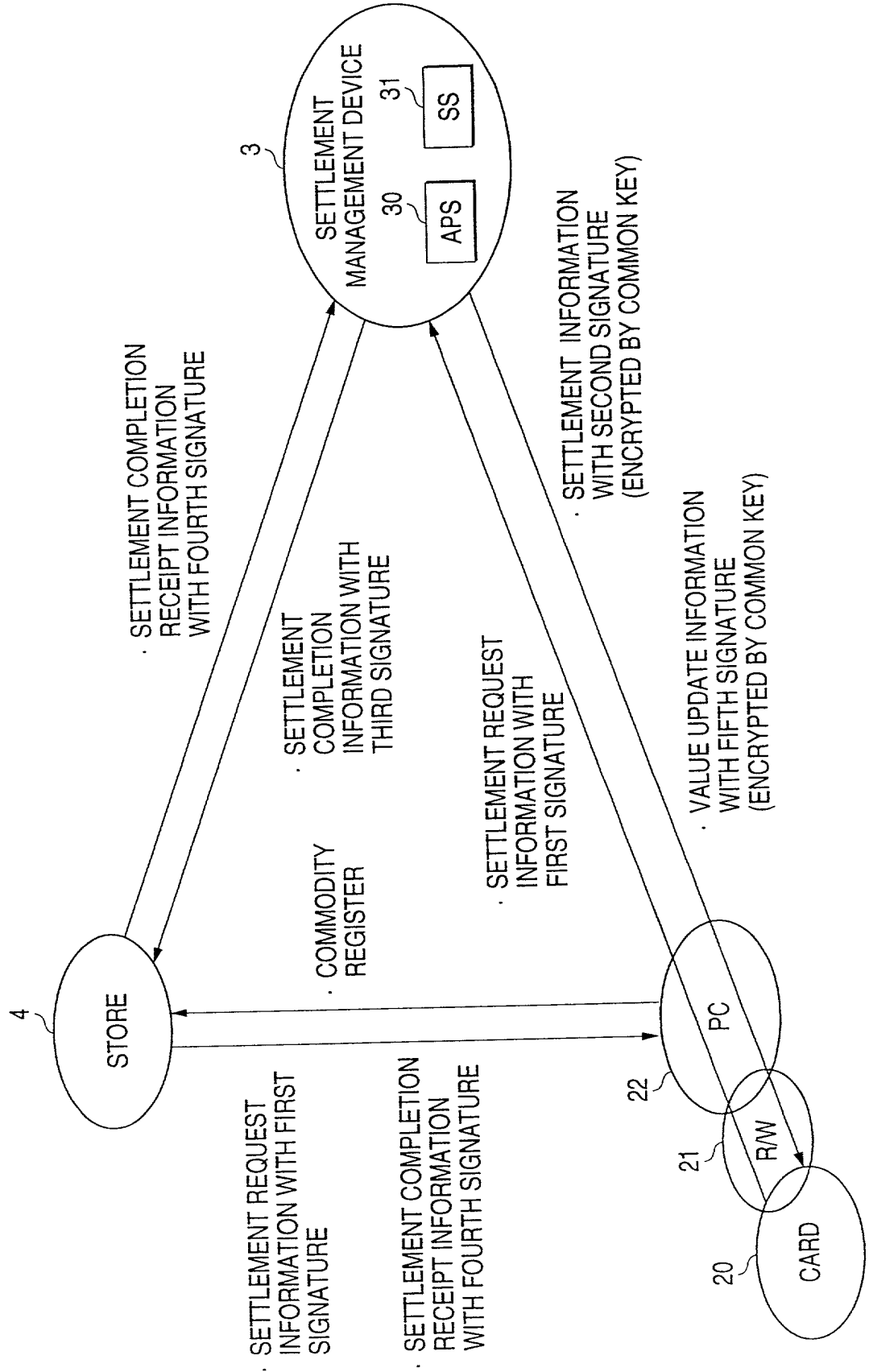*FIG. 7*

FIG. 8

ELECTRIC MONEY OUTPUT

32 CAREFUL EXAMINATION AND SETTLEMENT SYSTEM

(BATCH PROCESS) TRANSMISSION OF CARD LOG INFORMATION

30 CYBER ELECTRONIC MONEY SYSTEM

⑧ TRANSMISSION OF SETTLEMENT COMPLETION INFORMATION WITH THIRD SIGNATURE

⑥ SUBTRACTION OF VALUE INFORMATION IN CARD, EXTRACTION OF LOG (HISTORY INFORMATION IN CARD)

2 USER

⑦ TRANSMISSION OF SETTLEMENT COMPLETION INFORMATION WITH THIRD SIGNATURE

⑤ TRANSMISSION OF SETTLEMENT REQUEST INFORMATION WITH FIRST SIGNATURE AND CARD INFORMATION (IDm, BALANCE, ETC.)

④ ISSUE OF ORDER NUMBER, ISSUE OF SETTLEMENT REQUEST INFORMATION WITH FIRST SIGNATURE

② INFORMATION OF TOTAL SUM

① SELECTION OF COMMODITY

⑨ REQUEST FOR SETTLEMENT COMPLETION SCREEN

⑩ SETTLEMENT COMPLETION SCREEN

⑪ DOWNLOAD OF COMMODITY (IN THE CASE OF DIGITAL CONTENT SELLING (DL FORM))

41 MALL

③ REQUEST FOR ELECTRONIC MONEY SETTLEMENT

42 MEMBER STORE

FIG. 9

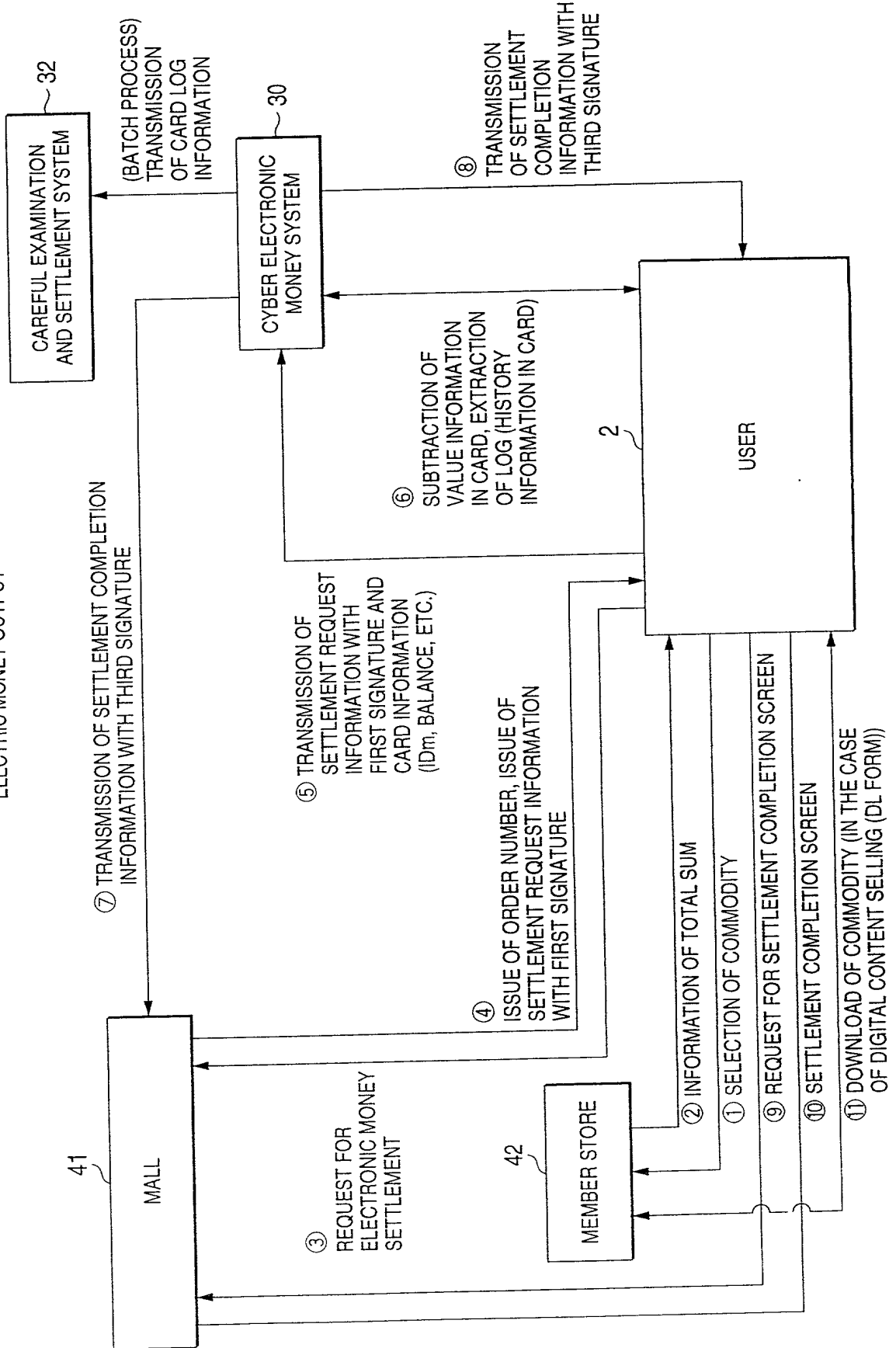COMMODITY INFORMATION TRANSMISSION SEQUENCE

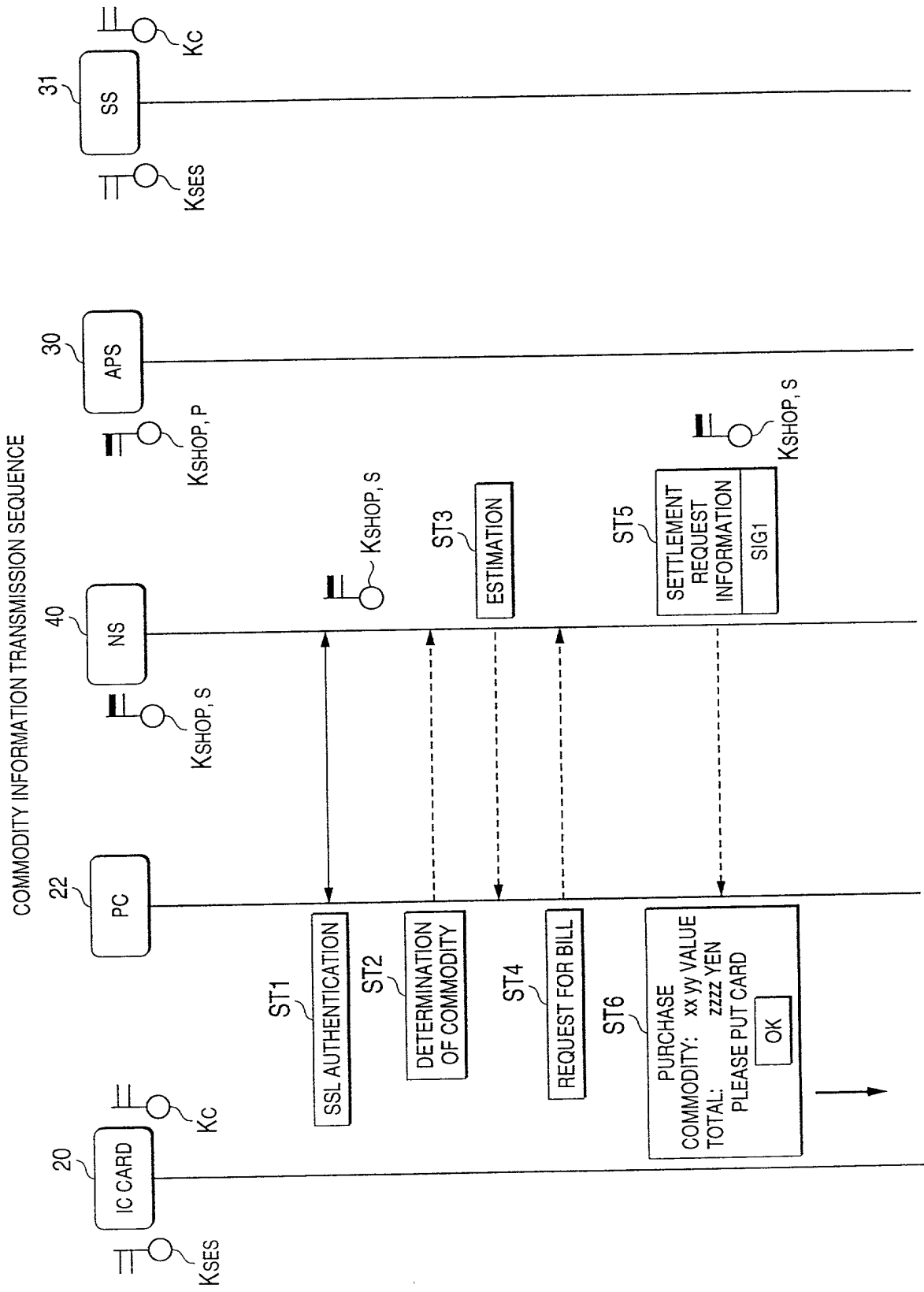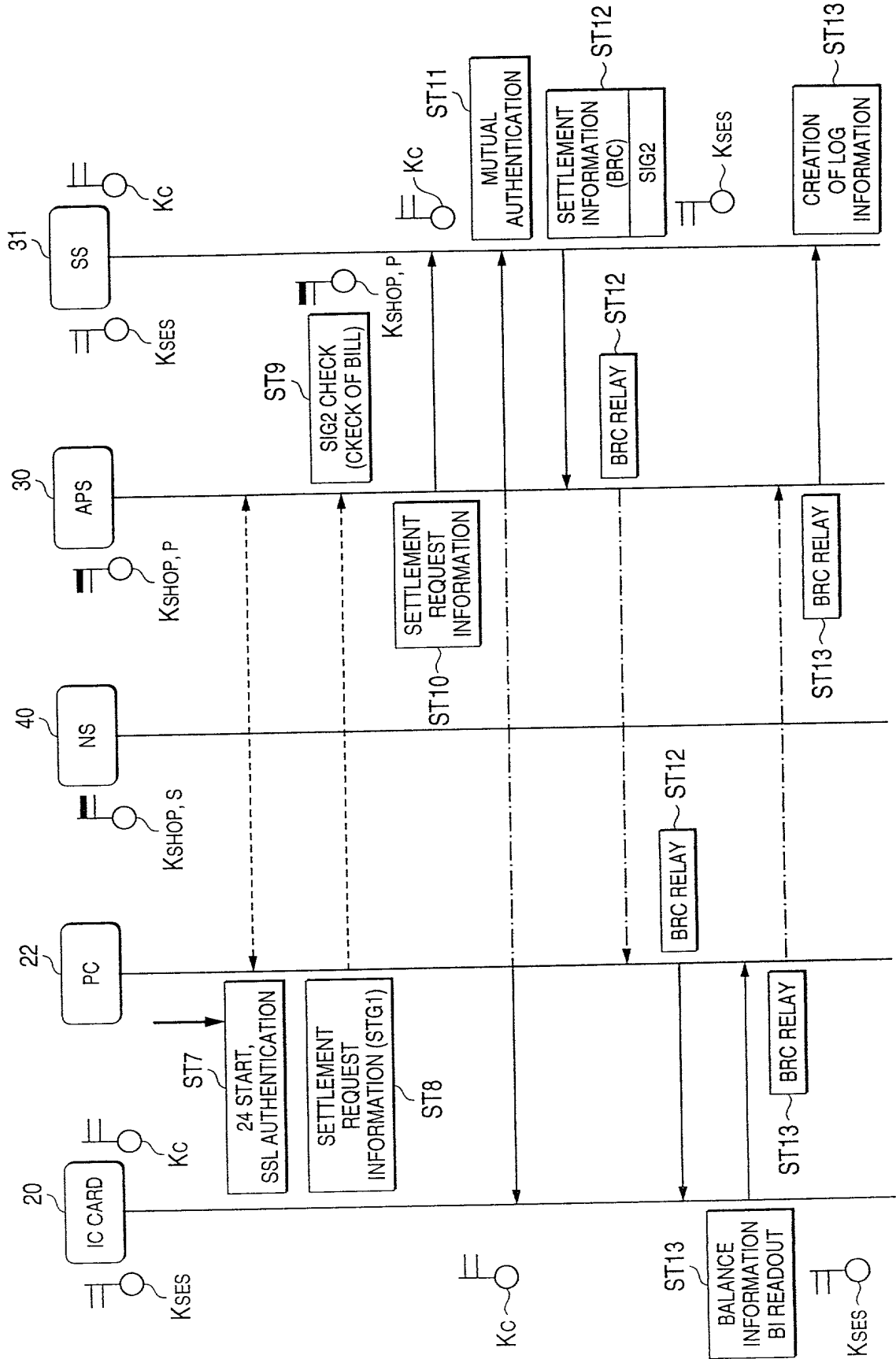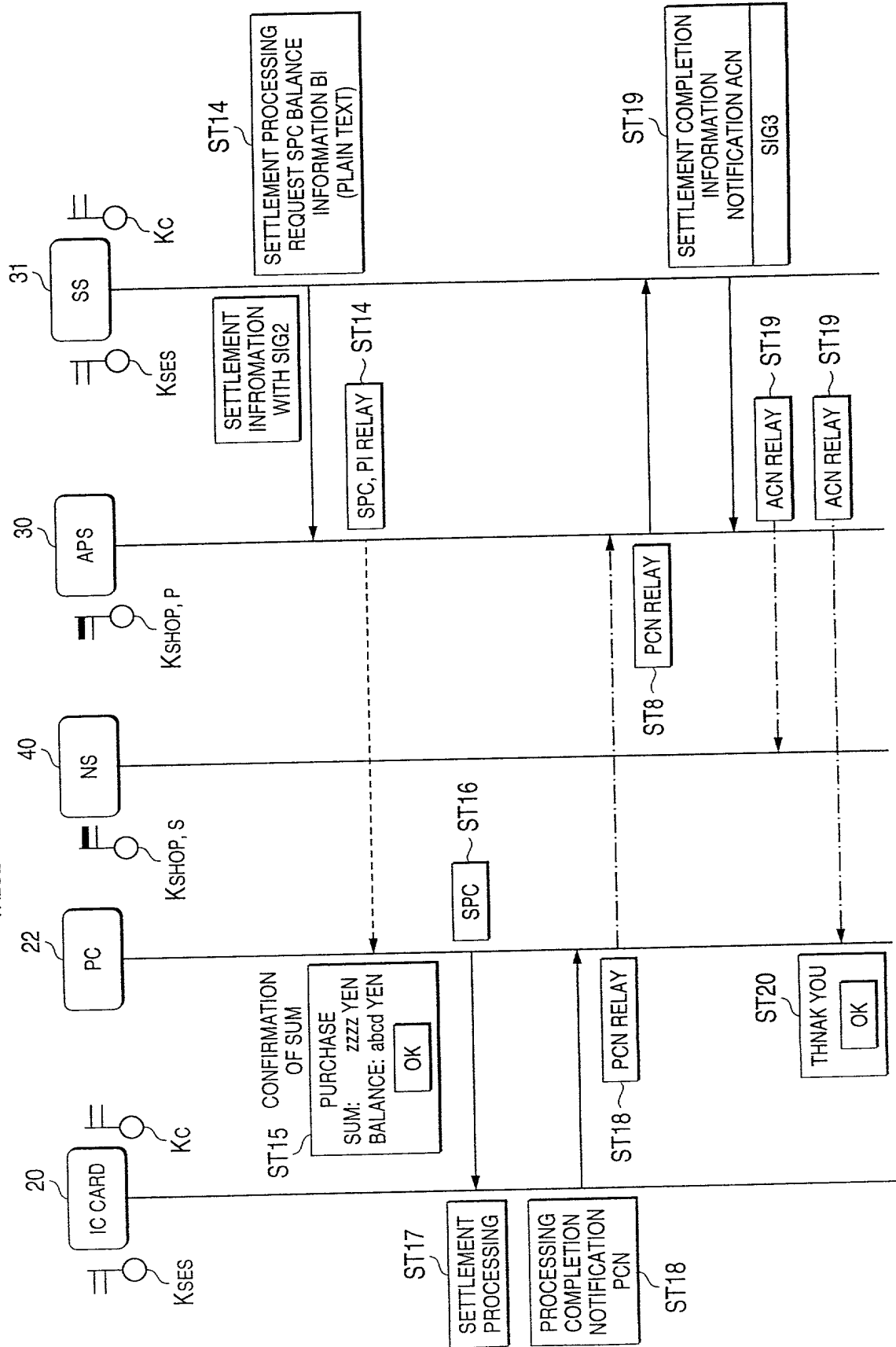*FIG. 10*

VALUE INFORMATION TRANSMISSION SEQUENCE (1)

FIG. 11

VALUE INFORMATION TRANSMISSION SEQUENCE (2)

FIG. 12

MEMBER STORE PAGE
< SELECTION OF COMMODITY >
PLEASSE SELECT COMMODITY

COMMODITY DESCRIPTION	UNIT PRICE
■ AAAA	350
■ BBBB	400
☐ CCCC	200

PURCHASE

FIG. 13

MEMBER STORE PAGE
< CART DISPLAY >

COMMODITY DESCRIPTION	UNIT PRICE
AAAA	350
BBBB	400
TOTAL SUM	750

TOTAL

FIG. 14

MEMBER STORE PAGE
< SELECTION OF PAYMENT METHOD >

TOTAL SUM: ¥750 YEN
◆ PAYMENT METHOD ◆

   ○ CREDIT CARD
   ○ DEBIT CARD
   ● ELECTRONIC MONEY
   ○ RECEIPT BY SURROGATE
     CONVENIENCE STORE

| OK |

FIG. 15

MALL PAGE
< PAYMENT >

TOTAL SUM:　　　　¥750 YEN
PAYMENT METHOD:　ELECTRONIC MONEY
ORDER NUMBER:　　1 2 3 4 5 6 7 8 9

SETTLEMENT PROCESSING IS PERFORMED.
ARE YOU OK?

| OK |

FIG. 16

MALL PAGE
< PAYMENT CONFIRMATION >

PLEASE SET CARD TO READER/WRITER

CANCELL

FIG. 17

MALL PAGE
< PAYMENT CONFIRMATION >

CENTER PROCESSING IS NOW
BEING PERFORMED.

CANCELL

FIG. 18

MALL PAGE
< PAYMENT CONFIRMATION >

MONEY BALANCE: ¥3,000
TOTAL SUM OF PAYMENT: ¥750
BALANCE AFTER PAYMENT: ¥2,250

OK   CANCEL

FIG. 19

MALL PAGE
< PAYMENT CONFIRMATION >

CENTER PROCESSING IS NOW
BEING PERFORMED.

CANCELL

FIG. 20

MEMBER STORE PAGE
< DOWNLOAD OF COMMODITY >
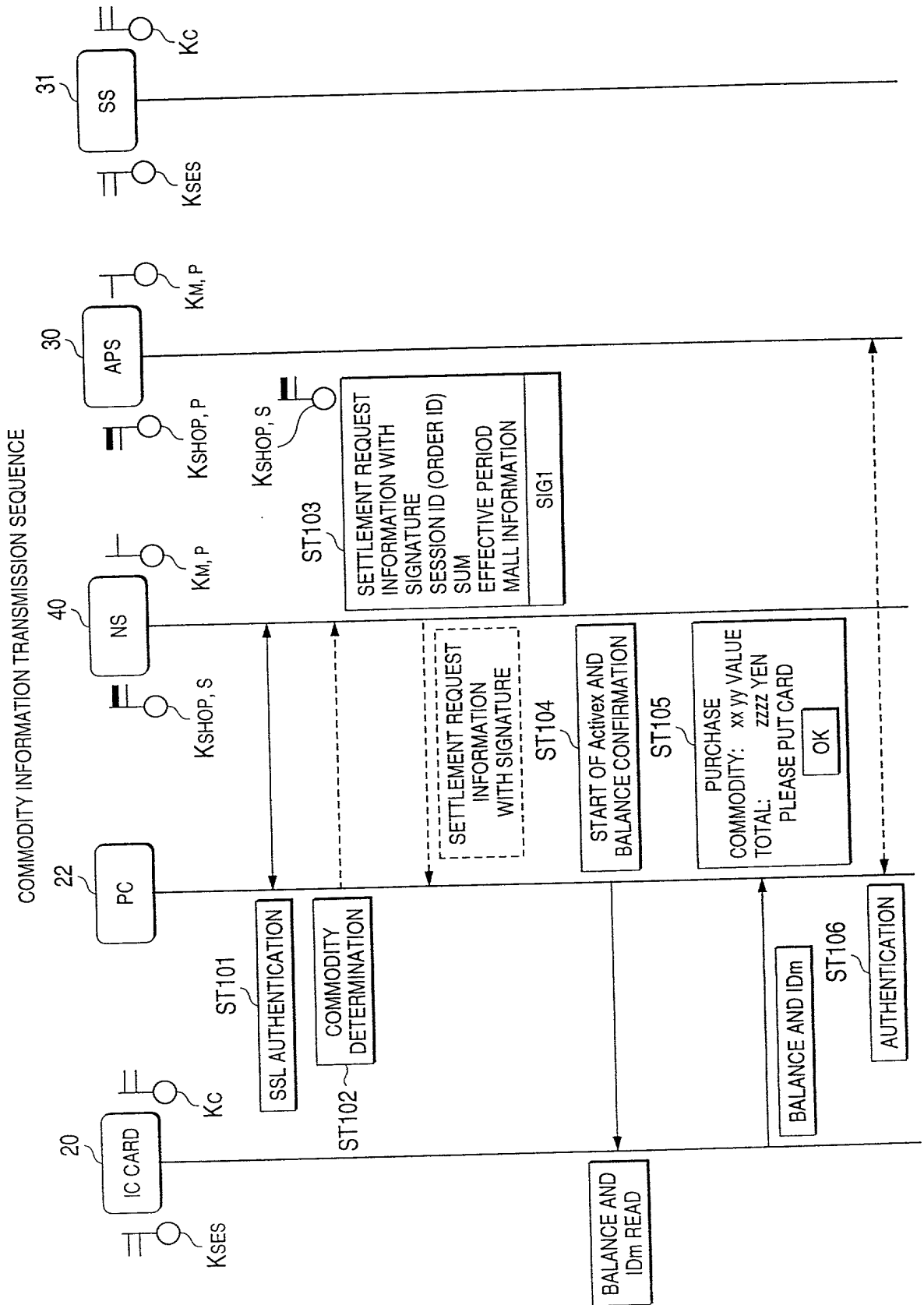
PLEASE DOWNLOAD.

AAAA | DOWNLOAD |

BBBB | DOWNLOAD |

FIG. 21

COMMODITY INFORMATION TRANSMISSION SEQUENCE

FIG. 22

VALUE INFORMATION TRANSMISSION SEQUENCE (1)

FIG. 23

VALUE INFORMATION TRANSMISSION SEQUENCE (2)

KSES	KC			KSHOP, S	KM, P
IC CARD 20	PC 22		NS 40		

KSHOP, P	KM, P	KSES	KC
APS 30		SS 31	

PROCESSING OK
ST110

ST110 — RELAY

ST110 — RELAY

SETTLEMENT COMPLETION INFORMATION WITH SIGNATURE — SIG3
ST111

SETTLEMENT COMPLETION
ST111

SETTLEMENT COMPLETION INFORMATION WITH SIGNATURE

SETTLEMENT COMPLETION RECEIPT INFORMATION WITH SIGNATURE — SIG4
ST112

SETTLEMENT COMPLETION RECEIPT INFORMATION WITH SIGNATURE

SETTLEMENT COMPLETION
ST113

THNAK YOU
OK
ST114

FIG. 24

ELECTRONIC MONEY PAYMENT

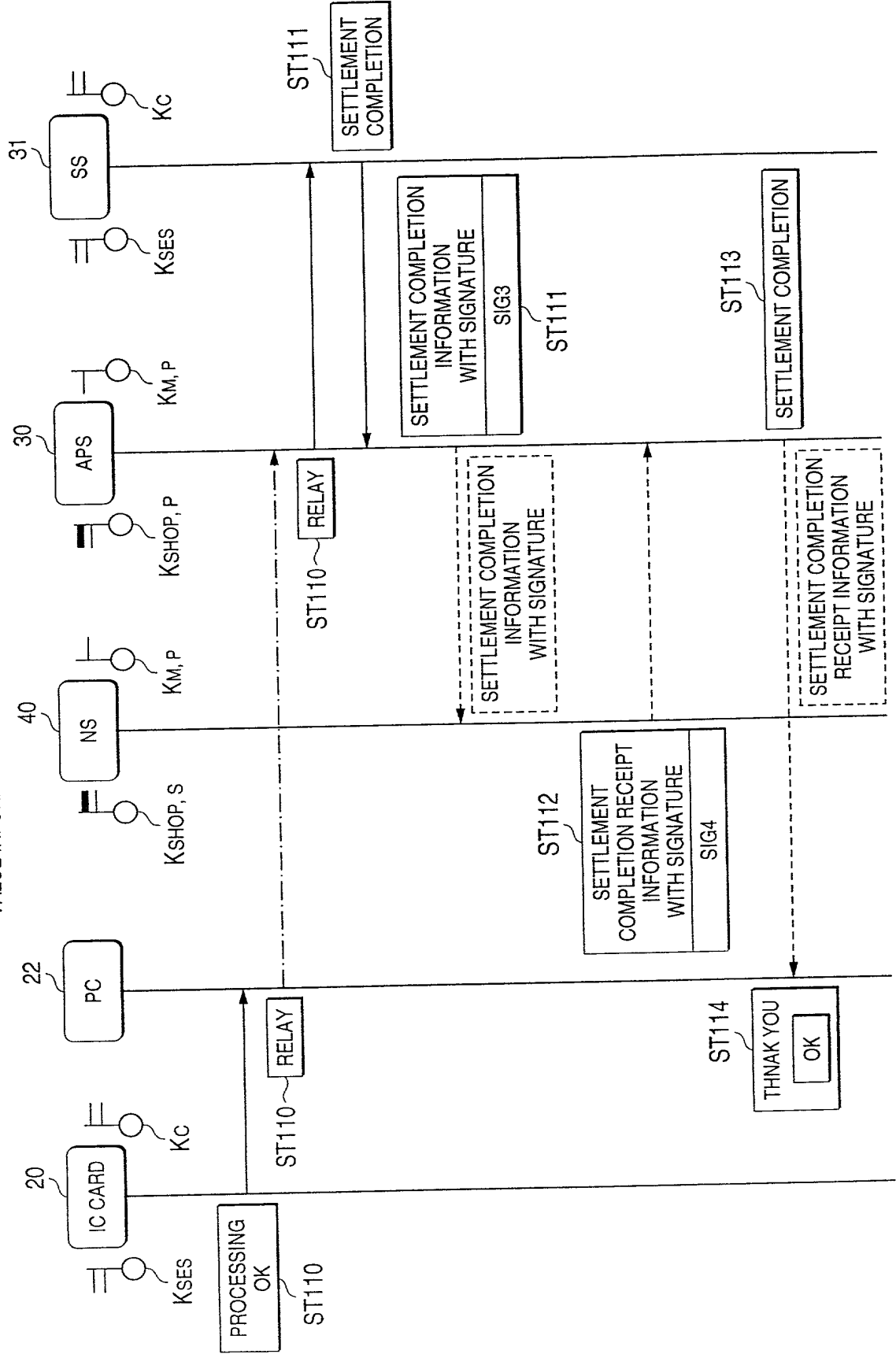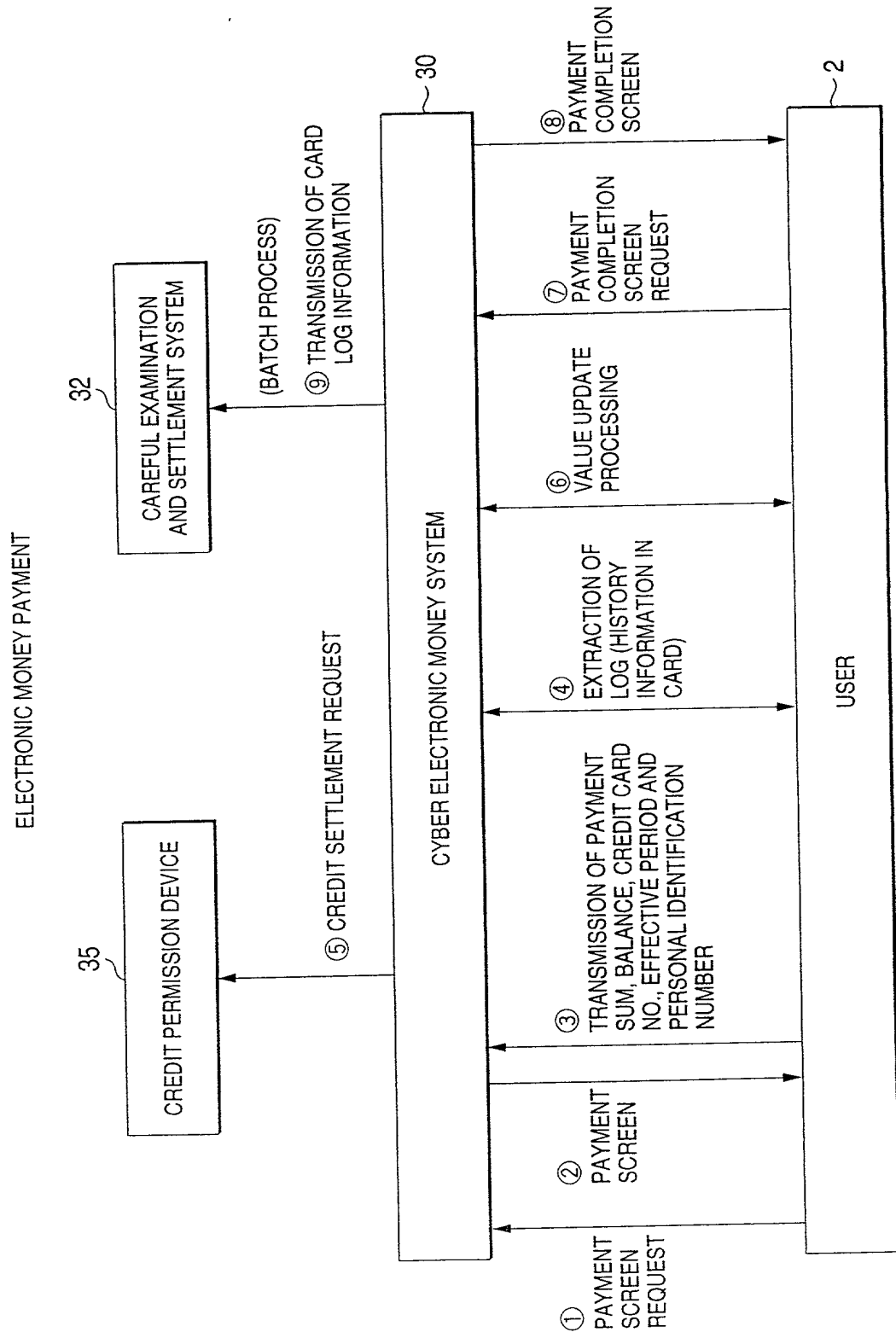## FIG. 25

TOP PAGE

PLEASE SELECT SESRVICE.

1. <u>PAYMENT</u>
2. <u>DISPLAY OF TRANSACTION HISTORY</u>
3. <u>INQUIRY</u>

⋮

FIG. 26

PAYMENT

PLEASE SET CARD TO
READER/WRITER.

| CANCELL |

FIG. 27

PAYMENT

CENTER PROCESSING IS NOW
BEING PERFORMED.

CANCELL

FIG. 28

PAYMENT

MONEY BALANCE: ¥3,000
PAYMENT SUM:
DATE: MONTH   DAY

OK   CANCEL

FIG. 29

PAYMENT

MONEY BALANCE: ¥3,000
PAYMENT SUM: ¥10,000
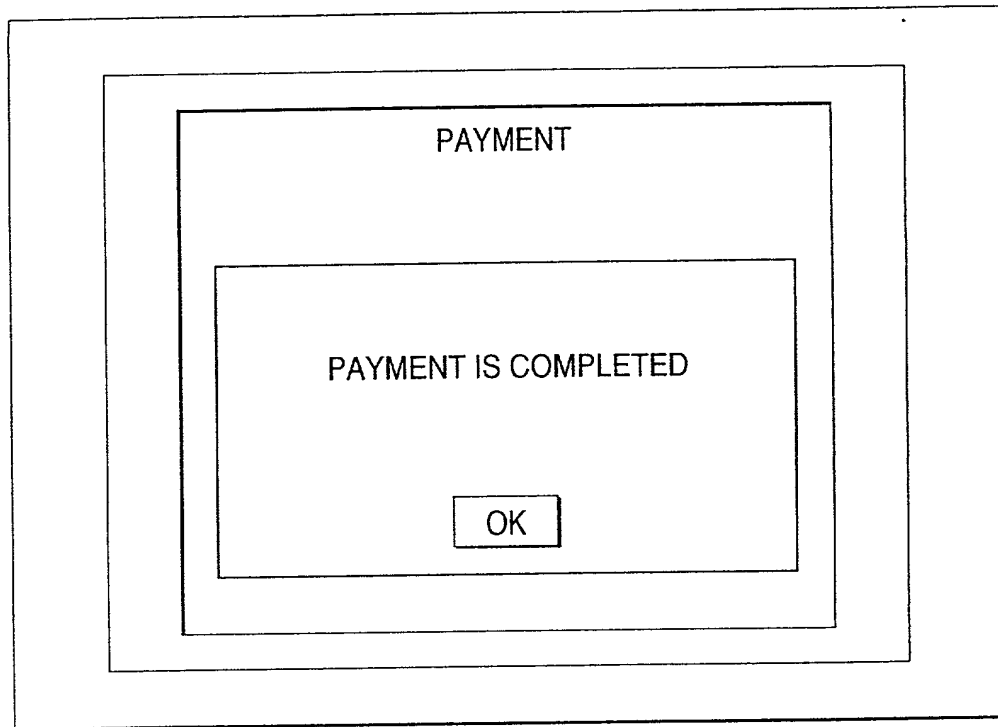DATE: MONTH ** DAY **

OK   CANCEL

FIG. 30

PAYMENT

CENTER PROCESSING IS NOW
BEING PERFORMED.

CANCELL

FIG. 31

PAYMENT

PAYMENT IS COMPLETED

OK

FIG. 32

TOP PAGE

PLEASE SELECT SESRVICE.

1. PAYMENT
2. DISPLAY OF TRANSACTION HISTORY
3. INQUIRY